## REMARKS/ARGUMENTS

Reconsideration is respectfully requested of the Office Action dated September 3, 2008.

## 1. Claims Amendments

Claim 1 has been amended to correct a minor typographical issue.

New Claim 25 has been added to capture an embodiment in which the saturated or olefinic halogenated hydrocarbon(s) is fluorinated for between 3 and 100 seconds.

## 2. 35 U.S.C. \$102 & \$103

Claims 8 and 11-24 are rejected under §102 as being anticipated by United States Patent No. 5,523,500 to Cheminal et al. (Cheminal '500) and/or under §103 as being obvious over Cheminal '500. Applicant traverses this rejection.

Initially, Cheminal '500 relates to mass catalysts based on chromium and nickel oxides obtained from a process including fluid colloidal solution (sol) deposition. Sol-gel techniques, such as one used in Cheminal '500, produce unique pore structures that are defined by the microstructure. Because of these uniquely instilled properties, the claims in and specification of Cheminal '500 are directed to a catalyst defined by a product by process. As (1) catalysts produced using sol-gel techniques are inherently distinct from those prepared using non-sol-gel techniques and (2) Applicant's catalyst is NOT prepared using sol-gel techniques, Applicant's catalyst as claimed could not have been disclosed or anticipated by Cheminal '500.

Further, the examiner has not shown that the Cheminal '500 discloses or renders obvious the use of a <u>catalyst prepared</u> by using a chromium oxide having a BET specific surface area of greater than 150 m<sup>2</sup>/g and a pore volume of greater than 0.15 ml/g. <u>Even if</u> Cheminal '500 disclosed catalysts created by starting with a chromium oxide material that has a surface area greater than 150 m<sup>2</sup>/g and a pore volume size of greater than 0.15 ml/g, such a disclosure would not render obvious a catalysts prepared by <u>impregnating</u> the chromium oxide with a solution of nickel.

Because the catalyst in Cheminal '500 is unique or defined by process itself, it cannot teach anything more without some type of impetus or blueprint. There is nothing in Cheminal '500 to suggest that any technique, other than the sol-gel technique, can be used to prepare a

catalyst. Further, there is nothing to suggest the sol-gel technique to could be extended to other methods to render other catalysts. As Cheminal '500 does not suggest a relationship between (1) the BET specific surface and pore volume properties of the chromium (III) oxide starting material and (2) Applicant's catalyst created by impregnation, Cheminal '500 would not suggest that the results exhibited by Applicants' claimed catalyst are to be expected. The fact that the sol-gel technique yields an unexpected catalyst suggests that other techniques cannot be predictably taught from Cheminal '500.

As explained in the application, the <u>ultimate</u> BET specific area and the pore volume are controlled by the selection of the chromium oxide and by the <u>deposition</u> technique, which involves impregnation. Contrary to the examiner's position, the positive recitation are the steps themselves rather than only the specific starting material. <u>General Electric Co. v. Wabash Appliance Corp.</u>, 304 US 364, 373 (1938) ("a claim may validly describe a new product with reference to the method of production"). The ultimate form of the chromium oxide is established by the impregnation stage. Paragraph 011. As the catalyst product itself is unique with unique properties as evidenced by the examples, Applicant submits that its catalysts would not be of the type disclosed in Cheminal '500.

Finally, Applicant's catalyst exhibits improved fluorination as shown by Examples 10 and 11. Example 10 shows that the catalyst showed improved fluorination (>70%). The catalyst outside the parameters of the claims have an activity in fluorination that is poor (>50%). See comparative example 11 (showing the fluorination capabilities of catalysts having starting pore volume and specific surface area were poor). Thus, it is the starting materials and the process that results in the new catalyst.

Accordingly, as the examiner has not shown that Cheminal '500 discloses a method for fluorination using Applicant's novel catalysts, Applicant submits that the rejections based on Cheminal '500 are improper and should be withdrawn.

## CONCLUSION

Applicant submits that the patent application is in condition for allowance and respectfully requests such action. If the examiner has any final concerns that can be addressed over the telephone, the examiner is invited to contact the below-signed attorney of record.

Respectfully submitted,

/Nigam/

Nigamnarayan Acharya Reg. No. 54,953

SMITH GAMBRELL & RUSSELL LLP 1230 Peachtree Street, NE Suite 3100, Promenade II Atlanta, GA 30309 Phone: 404.815.3690

Fax: 404.685.6990

LIT\1056710.1